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# **Technology and Governance: Enabling Participatory Democracy**

Chakrabarty, Aritra

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# Technology and Governance: Enabling Participatory Democracy

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## Abstract

Several factors and dimensions are taken into consideration which influences the definition and scope of e-governance. Here 'e' implies technology driven governance. By application of Information and Communication Technology (ICT) for the delivery of government services, exchange of information and services becomes efficient. Here exchange and flow of information takes place at three levels-

- Government to consumer (G2C)
- Government to business (G2B), and
- Government to government (G2G)

The perspective of e-governance is the “use of technologies that both help governing and have to be governed”. In order to understand debate and analyze the concept of e-governance and how its contours have changed, we first need to recognize e-democracy. It is a process and structures that encompass all forms of electronic interaction between the elected government and the citizenry. E-democracy as a concept and practice precedes participatory democracy which has been defined (Kramer, 1972) as that process that emphasizes broader participation in governance operation. Thus e-governance is conditioned on the fact that there exists a democratic political system and it involves a participatory framework of governance.

This paper will look at the changing paradigm of e-governance through three broad questions-

- 1) Has ICT enabled civic engagement and initiated public opinion in this developing economy
- 2) Has it succeeded in reversing apparent defects in the electoral system
- 3) Has ICT lead to the spread of information from the state to the society

## Introduction

Can Individualist Democracy provide a workable form of participatory democracy? Benjamin Barber has relied on this model to develop a thought-provoking vision of a more participatory politics, which he labels strong democracy. Pointing to how liberalism has successfully contained democratic impulses, Barber argues that liberalism in the form of privacy; individualism, rights, and representation undermine participation and citizenship, ultimately sapping the sources of energy and legitimacy that are required for effective governance. Barber

has no interest in making representative democracy more responsive; rather, strong democracy is a form of government in which all of the people participate in decision-making and implementation. While recognizing that the complexity of modern society imposes limits on direct democracy, participation by all is imperative because it creates shared interests, a common will, and community action, all of which inevitably give legitimacy to politics.

Liberal democracy, or 'thin' democracy, according to Barber, fails because it alienates human beings from each other. Barber insists that liberal democracy has fallen prey to authoritarianism and immobilism. These faults derive from the theory of liberal democracy itself. Three dispositions-anarchist, realist, and minimalist define liberal democracy. These dispositions are clusters of attitudes, inclinations and values combined in a political democracy. The anarchist disposition holds that, since independent free agents can satisfy their needs without politics in a conflict-free natural environment, political activity has only a protective function. The realist disposition acknowledges that human beings pursue their self-interest and so attempts to constrain disruptive impulses with instruments of power like fear, sanctions, and coercion, thereby making liberty the converse of power. The minimalist disposition attempts to reconcile inevitable conflict through tolerance and pluralism.

Barber argues that an excess of liberalism has undermined our democratic institutions and brought about the set of crises we still find ourselves struggling against: cynicism about voting, alienation, privatization, and the growing paralysis of public institutions. As a power relation, strong democracy is the logical consequence of the defining attribute of politics, essential contestability. Without external values, the collective basis of action and the mode of control are politics itself. Politics as participatory processes determine shared values and eventuate in acts of political judgment. Protecting individuals' values, processes of participation shape "collective interests or truths." Community grows out of participation and at the same time makes participation possible; civic activity educates individuals how to think publicly as citizens even when citizenship informs civic activity with the required sense of publicness and justice. (*Strong Democracy: Participatory Politics for a New Age*, Barber R. Benjamin University of California Press, 1994).

The current fashion for deliberative democracy began as a political theory-led enterprise, in the sense that it was deliberative democratic theory that emerged first in the 1990s and was followed by empirical studies and also the creation of special deliberative forums.

Direct democracy is a form of democracy in which people decide policy initiatives directly, as opposed to a representative democracy in which people vote for the representatives who then decide policy initiatives. Representative democracy is a variety of democracy founded on the principle of elected officials representing a group of people. All modern western-style democracies are representative in nature. Representative system deteriorates towards an oligarchy or partocracy. It comes into particular general favour in post-industrial revolution nation states. Globally, a major portion of world's population lives in representative democracies

including constitutional monarchies. Representative democracy, although the most existential, is the most limited form of democracy. Citizen participation is limited to choosing representatives who will govern the society and undertake policy actions on behalf of the citizen. Direct democracy is an extension of the usual voting system to include referendum, plebiscite, initiatives and recall process.

A **referendum** is a direct vote in which an entire electorate (representatives) is asked either to accept or reject a particular proposal. This may result in the adoption of a new constitution, a constitutional amendment or a law. It is an expression of direct democracy as outlined above. However, in most modern democratic systems, referendums need to be understood as an element that is predominantly representative in character. As such, referenda are used selectively, covering issues such as changes in voting system. The outcome of a referendum, is binding on the government or the state. On the other hand, a **plebiscite** is non-binding but as an expression of political will, carries considerable weight. It has been generally witnessed that acting against the outcome of plebiscite vote results in politically negative consequences for the ruling government. Under **initiative** as a political process, citizens can bypass the government legislature by placing proposed act or law on popular vote. Depending on the type of democratic system, the initiative question goes on the ballot if the legislature rejects it, submits a different proposal or takes no action. Under **recall process**, it allows citizens to remove and replace a public official, if found guilty of misconduct of authority, before the end of term in office. All these processes and methods are components of direct democracy. However, the usage of such has declined in societies across the world. Citizen participation with the government through the above mentioned processes has been gradually overtaken by a more inclusive form of participation-involvement in the governance and decision making process. This is referred to as participatory democracy which goes beyond direct democracy by providing specific legitimization/refutation of state action and involvement of people in the governing process, including decision making and debate on policy initiatives (Larry Johnston, 2012).

## **Background Study**

According to Lynd, participatory democracy proposes to accomplish two specific goals: that each individual takes part in all decisions affecting the quality and conduct of his/her life; and that society is arranged to promote the independence of human beings and to provide the means for their common participation” (Lynd 1965). This means that the participatory ideal can be interpreted as a design of social inclusion, which aims at institutionalizing a new democratic sovereignty relying on the dialectic between civil society and the political system (Santos 2002).

## Participatory and deliberative democracy

Since the early 1960s, leading philosophers, sociologists and other political theorists have produced a considerable body of research on the effectiveness of participatory and deliberative democracy as a tool for transforming communities through empowering citizens to influence public decisions, both in western democracies and developing regions. Participatory democracy as outlined earlier, involves active participation of individuals in governance and decision making process-this implies an educative function (Green 1999, 2008; Fung 2004; Alexander 2006; Siriani and Friedland 2001) for citizens. Democratic participation can be both empowering to the participants and effective in influencing the representative bodies that have the final power to make public decisions. Of course, people who come to know about others' needs through such participatory democratic experiences do not thereby come to fully share those needs in a practical, lived way, but they may come to share an active motivation to do something to help those who feel these needs directly – to change things to some extent so as to meet those needs and to change the conditions in which they arise. The concept of participatory democracy as observed and recorded incorporates various cultures (more prominent in the case of Indian society).

Participatory and deliberative approaches, albeit both focused on radicalizing the ideals of democracy, appeared originally to involve distinct normative expectations and political goals. Their origins goes back to different geographies—from South America and developing countries, the participatory project (Santos 2002, Allegretti 2009) and from North America and Western Europe, the deliberative (Habermas 1992, Rawls 1993).

Deliberative democracy is a form in which deliberation is central to decision making process. It has adopted elements of both consensus decision-making and majority rule. It differs from the traditional forms in that *authentic deliberation* which goes beyond voting is the primary source of legitimacy for the law. Deliberative democracy is compatible with both the overarching forms of democratic systems-direct and representative. The term "deliberative democracy" was originally coined by Joseph M. Bessette in his 1980 work "Deliberative Democracy: The Majority Principle in Republican Government." Deliberative democracy holds that, for a democratic decision to be legitimate, it must be preceded by authentic deliberation, not merely the aggregation of preferences that occurs in voting. Here, *authentic deliberation* implies that decision-making process is free from distortion of unequal political power distribution.

As an element of democracy, deliberative decision making process began to attract attention of political scientists from 1990s onwards. Early work on deliberative democracy was part of efforts to develop a theory of democratic legitimacy. In the manner stated, deliberative democracy thus is a successful offshoot of participatory democracy process, which relies on authentic deliberation.

Deliberative democracy could be effortlessly placed within the concept of strong democracy as mentioned by Benjamin Barber. As argued by Barber (*Strong Democracy: Participatory Politics for a new Age*, 1984), representative democratic system is rooted in individualistic rights perspective in that manner it remains “thin”, diminishing the role of citizens in democratic governance. In a strong democracy, people –citizens – govern themselves to the greatest extent possible rather than delegate their power and responsibility to representatives acting in their names.

### **Role of technology in participatory democracy**

Towards the end of the 1980s, there was recognition that the world was changing qualitatively and political practices were remote from the electorate (Hall & Jacques, 1989; Wright, 1994). Economies with well established democratic systems had begun to exclude the role of citizen participation. Societies which had achieved high levels of per capita growth now focused their attention to issues of polity and governance. In Rostow’s Stages of Growth model, it has been argued that growth proceeds in stages of varying time length. **The stages identified were – traditional society, pre-condition to take off, take off, drive to maturity and age of high mass consumption.** Rostow asserts that countries go through each of these stages fairly linearly, and set out a number of conditions that were likely to occur in investment, consumption and social trends at each state. As economies progress from traditional agrarian structure to industrialized societies, the demand function changes, with new variables replacing older ones. With reduction in poverty and more equitable distribution of national income, society is confronted with new consumption choices. In the final stage of high mass consumption a society is able to choose between concentrating on **military** and **security** issues, on **equality** and **welfare** issues, or on developing great **luxuries** for its upper class. Each country in this position chooses its own balance between these three goals. There is a desire to develop an egalitarian society and measures are taken to reach this goal. According to Rostow, a country tries to determine its uniqueness and factors affecting it are its political, geographical and cultural structure and also values present in its society. An underlying assumption is the role of the government regarding its control over domestic development. Across all stages, the state plays an important act in meeting the demands of the society. In this regard, the kind of political structure to be followed and practiced is also a part of the process of development. Society is faced with alternative choices, in the form of policy initiatives as explained in the earlier section, and to choose a particular consumption bundle (for example Right to Information and Right to Free and Compulsory Education) through voting process.

In participatory democratic system, this will take the form of direct citizen involvement in governance and decision making process. To facilitate this process, we analyze the role of technology as to how application of information and communication technology (ICT) impacts civic representation in democracy.

The argument that has developed in popular literature is that modern politics needs to renew public trust, and a new shared framework of beliefs and interactive links between state institutions and civil society is required. Democratic governments are forced to re-think the way they undertake their business, deliver services and interact with citizens. This applies to all levels of government--local, regional and national which needs to respond the needs of the people. The ability to access and share information, whether through individual, group or mass communication is a cornerstone of democracy as it is a foundation for decisions that citizens take in everyday life as well as in elections and as a part of civic participation. ICTs play a central role in the information ecology of modern societies. On the one hand this entails collecting and making information available, and on the other to use established and new media to inform the population.

### **ICT and Electronic democracy**

E-democracy (a combination of the words electronic and democracy) incorporates 21st century information and communications technology to promote democracy. That means a form of government in which all adult citizens are eligible to participate equally in the proposal, development, and creation of laws. E-democracy encompasses social, economic and cultural conditions that enable the free and equal practice of political self-determination. E-democracy forms the support and enhancement process of democracy, democratic institutions and democratic system by means of Information and Communication Technology (according to the definition of the Council of Europe).

The effective engagement of citizens by governments rests on their recognition of access to information as a basic precondition, consultation as central to policy-making and public participation as a relationship based on partnership. The new tools offered by ICTs can offer assistance in each of these domains. The internet has become the default medium of choice to provide citizens with such level of access to government information, hitherto unparalleled in history of democratic governance. ICTs offer powerful tools for searching, selecting, and integrating the vast amounts of information held by the public administration as well as presenting the results in a form that can be readily used by individual citizens. A wide range of public bodies at various levels are now exploring the use of new ICTs to engage citizens in policy making: from local governments, to national governments and parliaments as well as those operating at the intergovernmental or international level. The increasing use of ICTs in development context is driven by the objective of simplifying and improving governance process. The use of technology in general, and ICT in specific in democracy process irons out the issue of lack of transparency of the state and strives to eliminate the existing legacy of negligent, inefficient and corrupt systems and bureaucratic controls in the path of development. In the emerging economies and developing nations, there's a common discord among the people that ineffective state machinery is a major impediment to growth. In such cases, citizens turn to ICT to voice their unrest. At the outset of the paper, we had been concerned with the various forms of

democratic systems and the recognition of how one particular process of governing and governance takes into account each individual as well as involve greater good for the society.

It is now understood that such a “strong” democratic system can be put to action through the use of technology. The emergence of the personal computer in the late 70s and early 80s and the longer gestation of the new forms of people-controlled communication facilitated by the Internet and Usenet in the late 80s was a direct result of the mass movement of the 1960s in the developed world. Back then, masses of people began to realize their potential to affect how the world around them works. People rose in protest to the ways society was out of control. The personal computer movement of the 1970s created the personal computer. By the mid 1980s they forced the corporations to produce computers which everyone could afford. This was a time in America when citizens were awakening to the myth of functioning democracy. They felt that the United States was a democracy which never existed. A representative democracy with no direct say of the citizens; it was realized that a medium is required for active citizen communities to debate and discuss.

This is how the personal computer and the internet took birth. In the present development milieu, technology is trying to break the communication barrier between the government and the citizen, and thus create a dialogue between the ‘governing’ and the ‘governed’.

Since the 1990s, the United Nation’s Global Development Network (UNDP) has been giving special focus on the development and use of specific ICT applications to address traditional development problems that beset developing societies. Efficient and effective deployment of ICT is now considered a key factor for a country’s socio-economic development in contemporary development discourse. The uses of ICT is not only limited to modernizing democracy but it also contains answers to some key challenges for a nation in entering a sustained growth phase and integrating with the global economy. In democratic process, the use of ICT can lead to significant cost reductions and efficiency gains, more transparency and accountability. The ICT revolution is radically affecting the way we share information-ranging from financial, economic to developmental issues. Governments, Non-governmental organizations (NGOs) , businesses and institutions have adopted ICT into their functional framework and day to day organizational processes. ICT as a tool has been recognized as one of the significant investments the world can make for a knowledgeable and efficient future. However, it must be kept in mind that the fundamental resource of the world is its people. Thus the importance of ICT must lie in the possibilities, through its varied uses, which open access to knowledge, information and communication. These are the building elements of present day economic and social interaction. One such use of ICT has been in revolutionizing democratic process through the advent of electronic democracy, as defined earlier. The various modes of information technology have found application in enhancement of democratic processes and institutions, thereby leading to the development of E-democracy.



In the 21<sup>st</sup> century, the ability of governments across nations, specifically in developing and emerging countries to provide a stable political system has been questioned repeatedly. Several examples exist which show how economic growth without stable and smooth functioning government can have repercussions on the society. Thus the ability of citizens to participate in the political process is a key issue for governments because of its attendant benefits. The increasing use of ICT tools, especially the *internet* has yielded positive impacts in today's society with respect to participation in decision making process which affects the lives and livelihoods of citizens. With e-democracy, ICT can help build trust by engaging citizens in the policy process and promote open and responsible government.

Many countries, such as United Kingdom (UK), United States of America (USA) have testified the positive impacts of ICT use for effective conducting of democracy. It has landed high on the political agenda of industrialized nations such as Canada, Singapore, etc. In developing countries, e-democracy has emerged as a major alternative process to established democratic system to enable citizen participation in policy debates. Changing attitudes of society's world over has brought into prominence the use of ICT as a powerful medium in enhancing electronic democracy as a process to ensure transparency in government action and accountability of public spending. However, the potential of using ICT in developing countries remains largely unexploited due to different human, organizational and technical factors. ICT use comes with its own set of challenges and associated risks. Nonetheless, some e-democracy initiatives have flourished in developing countries like Brazil, China, India, etc.

## **Spread of Information technology**

In a remarkably short period of time, internet and mobile technology have become a part of everyday life for some in the emerging and developing world. Cell phones, in particular, are almost omnipresent in many nations. Mobile technology is also changing economic life in parts of Africa, where many are using cell phones to make or receive payments. While the internet still has a limited reach in the emerging and developing world, once people do gain access to the internet, they quickly begin to integrate it into their lives. A survey conducted by Pew Research Center in 24 emerging and developing economies, internet usage is high among young people. Internet usage is also strongly correlated with income. A higher GDP per capita implies higher percentage of internet users- Chile, Argentina and Russia have the highest internet usage rates (among the countries surveyed). Meanwhile, these rates are especially low in two of the poorest countries surveyed, Pakistan and Uganda, where roughly nine-in-ten never go online.

According to statistics published by the International Telecommunication Union (ITU), internet access for households increased from 44.7 percent in 2005 to 78.4 percent in 2014 in the developing world. For individuals, data on access to internet shows an increase of 53.83 percent for the same period in the developed world while the growth in case of individuals in the developing regions has been a stupendous 315 percent (from 7.8 to 32.4 in the nine year period). Estimates reveal that by the end of 2014, there will be almost 3 billion internet users, two-third

of which will be from the developing countries (ICT 2014 facts and figures). Internet user penetration has reached 40 percent globally, 78 percent in developed countries and 32 percent in developing countries. 2014 growth rates in developed countries remain at a relatively low, at 3.3 percent compared with 8.7 percent in developing countries. However, there are still 4 billion people around the globe who do not have access to the internet and more than 90 percent of those are in the developing nations.

Region wise, Africa will have almost 20 percent of its population logged to the internet by the end of 2014, up from 10 percent in 2010. For Asia-Pacific, one-third of its population will be online with around 45 percent of global internet users emerging from this region. In case of the developed regions the Americas have the second highest penetration after Europe globally, with the latter estimated to provide access to 75 percent population, the highest worldwide. However, internet penetration is reaching saturation in the developed countries and the number of households with internet access in developing countries overtook those in developed countries in 2013. Region wise, 36 percent of households in the Asia & Pacific had access to internet while the same figure for the Americas and Europe was 57 percent and 78 percent respectively in 2014. However, Africa stills lags behind with only one in every tenth household connected to the internet. However, on the positive side, growth remains in double digits for this region at 18 percent (2014), which is more than twice the world average growth rate. Thus it can be discerned that although in absolute terms, developing region lags behind in internet reach, and its growth rate has surpassed that of the developed world and will see high degree of penetration in the coming decades.

## **Information technology in India**

As per data from Internet and Mobile Association of India (IAMAI), In June 2013, India had 190 Million Internet Users. Of this, 130 Million belonged to Urban India and the rest 60 Million were from Rural India. In October, the number of internet users reached 205 Million and was estimated to reach 213 Million by December 2013. The number of internet users in urban India was 137 Million in October 2013 and reached 141 Million by December 2013. In Rural India, there were 68 Million Internet users in October 2013 and was expected to 72 Million by December 2013. Out of a population of 1.2 billion, the usage figure above gives a penetration rate of 15.8 percent.

Speaking of internet connectivity in India, mobile internet has seen rapid growth in the last decade as compared to broadband connectivity. Aided by the availability of cheap mobile phones and surge in telecommunications technology, internet connectivity is no more a matter of luxury. In the past, the lack of a high-speed broadband network and the cost of computers hampered the internet's reach in India. In addition, the strength of the country's traditional media means that many people continue to rely on newspapers and TV for information and entertainment rather than seeking out digital content. India's Internet revolution is being shaped by telecom players' strategies to reduce cost of access. Smartphone costs are falling rapidly as players achieve scale economies, while the proliferation of 3G/4G services in India is likely to reduce connectivity costs and overcome the challenge of limited fixed-line connections. As a result, nearly 75 percent of new users and more than half of India's base of Internet users in 2015 are likely to be mobile only subscribers who will use Internet-enabled devices. By contrast, mobile only users are likely to constitute a mere 10 to 15 percent of the market in India's regional counterparts, China and Malaysia.

However, with the rapid spread of high-speed mobile data, that is changing fast. According to a report by GSMA (Groupe Speciale Mobile Association) and Boston Consulting Group on the mobile economy in India, the entire mobile ecosystem, including suppliers of infrastructure and support services, handset manufacturers and content and application providers, contributed 1.3 percent to India's GDP in 2012. In addition to the direct contribution from the mobile ecosystem, the improved productivity brought about by mobile technology contributed an additional 3.8 percent to India's GDP. Similarly, 3G and 4G connections are expected to rise from 171 million (2014) to 409 million in 2017 while 2G connections will witness a drop from current 850 million to 750 million for the same period. In terms of users, IAMAI reports indicated at 185 million users accessing the internet on mobile handsets, by June 2014. According to the report, the number of mobile Internet users in urban India grew from 103 million in December 2013 to 126 million in March 2014 and further touched 153 million by June. Rural India, though accounting for the smaller share, registered strong growth to touch 32 million users (in June 2014) from 27 million in December 2013. The report also highlights the increasing expenditure made on mobile internet subscriptions, an indication of willingness of the population to spend their disposable income on internet connectivity.

## **ICT and civic engagement: How has it evolved in India?**

Several reports have pointed out to the growth of internet subscriber base, especially that of mobile internet users in India, even to the extent of estimating 330 to 370 million users by 2015, the second largest in the world after China (*Online and Upcoming: The internet's impact on India*, McKinsey & Company December 2012). With rising level of urbanization and increasing youth population as a proportion of the total (58 percent of people under 30 years of age), people are increasingly engaging on the internet, specifically through social media. Cheap mobile handsets with built in internet connectivity has made information sharing hassle free for majority

of the population. Populations projections suggest youth share at 360 million (between 15-30 years of age) by 2020. It is an established fact that young people use internet related technologies and participate in active content generation over the social space more substantially than the elderly population. What needs to be decoded is whether such involvement in the cyber medium is translating in civic engagement and ultimately to a cohesive public policy dialogue.

### **Argument 1: ICT in electoral process-**

We'll first approach through the role of ICT in electoral process-how the advent of ICT has changed the mammoth complexity involved in conducting elections in India and alongside led to greater participation of people in this democratic exercise. In order to integrate citizens in the democratic system and form an engagement with the government, the active involvement of the people in the voting process forms the necessary condition. The issue is not about mere vote count, rather the entire electoral process shows how the government is reaching out to the society and what tools is it using for this purpose-in this regard, the use of ICT tools has made communication with the citizens more efficient and transparent. In the case of India, ICT started to feature prominently in government initiatives from 2005 onwards. However, there are differences when it comes to states-the degree of implementation of ICT varies across the states and across rural and urban areas within a particular state. In the last decade, technology has taken an active role through the entire election process-

- generating awareness in the population,
- creating a transparent and hassle-free voter registration system,
- the actual process of conducting the elections
- introduction of electronic voting to remove duplicity and forged voting,
- automation of election results to rub out discrepancy and/or faulty reporting

As the data indicates, spread of internet technology through mobile has facilitated unhindered access to information regarding the election including party information, candidate profiles, constituency profile, knowledge on the voter registration mechanism, etc. The 2014 general elections which concluded in May recorded the highest ever voter turnout of 66.4 percent. This can partly be attributed to Election Commission of India (ECI) efforts in generating voter awareness through Systematic Voter Education and Electoral Participation (SVEEP) program. In comparison, the 2009 general elections had a miserable turnout of 58.2 percent.

However, it is important to elucidate that awareness need not translate into participation. Experience has showed that even greater awareness did not necessarily convert into greater participation. The issue was education of the voters. There is lot of gap between what the voters 'should know' and what they 'actually know' in important areas like registration, EPIC/ identity proofs, Polling Station location, use of EVMs, timings of the poll, do's & don'ts with regard to Model Code of Conduct. Thus ECI planned and rolled out a set of measures, collectively under SVEEP. The first phase was launched in 2009 during the Jharkhand Assembly polls.

Since the introduction of the program 23 assembly elections have been conducted (till December 2013). The second phase was rolled out from 2013 onwards, which covered the recently concluded national elections. The significant aspect of this program is the exhaustive use of internet technology to provide informed content to voters. Social media features prominently as a tool to disseminate information and educate the electorate.

Since the launch of SVEEP, there has been a consistent increase in Voter turnout in all elections since 2009 with record Voter turnout in Assembly Elections of Tamil Nadu, West Bengal, Punjab, Uttarakhand, Uttar Pradesh, Goa, Gujarat, Himachal Pradesh, Tripura, Mizoram, Delhi, Rajasthan, Madhya Pradesh and Chhattisgarh besides higher women turnout in the six states of Bihar, West Bengal, Tamil Nadu, Uttar Pradesh, Chhattisgarh and Rajasthan for the first time ever in their history. There has been significant increase in enrolment of electors and notable progress in bridging gender gap and the gap in the newly eligible youth category in registration on electoral roll from 2014 onwards. It is significant that 2.35 crores of the 81 crores electorate of India as on 31.01.2014 is in the 18-19 yr age-group.

However, the use of ICT remains restricted to urban areas only. In rural spaces, physical mediums of communication like inter-personal conversation with Anganwadi workers, ASHA workers, posters and pamphlets, street plays and other physical activities are comparatively more popular communication strategy for the rural voters. Given the fact the only 37 percent of the voters reside in urban areas, the restricted use of internet and other forms of ICT stands defeated when compared with the spread of internet, specifically mobile internet in rural areas. With 833 million population in rural areas (Census 2011), the estimated figure of 72 million rural internet users provided by IAMAI gives penetration rate of 8.64 percent while the same for urban areas stands at 37.4 percent. There is no need to probe any further-the stark contrast tells that the major chunk of the population does not have access to either broadband or mobile internet among host of other assets. The use of traditional methods of voter education implies that technology has had restricted reach and affordability is a pressing concern for the rural masses. It is a fact that cost of broadband internet remains high due to high cost of laying optical fiber network by the telecom companies. Although the presence of large number of players in broadband internet market makes the pricing competitive, the reason for limited spread stems from the fact that expenditure on internet is a negligible item of household monthly budget given the high amount of expenditure on food. Earlier, we stated that citizens are willing to spend more disposable income on internet connectivity- this however is half the information. There's a wide difference in expenditure across rural and urban areas, with the latter showing more willingness of people to spend on internet connectivity. Although presence of mobile handsets has made internet affordable, the numbers (32 million rural users) reflect a miniscule coverage as a proportion of the (rural) population.

## **Argument 2: Creation of an environment of civic engagement-**

The United Nations Education, Scientific and Cultural Organization (UNESCO) has recognized “youth” as the best period for creation of awareness regarding the community it thrives in and recognizing the responsibility of an independent adulthood. For statistical consistency across nations, the UN defines ‘youth’ as those persons between the age group of 15 and 24 years. Accordingly, India’s youth population is 231, 950,000 or 19.15 percent of total (Census 2011). Gender wise, 47.6 percent of the youth is females and the rest males. Across regions, rural areas have a higher share of youth with 68 percent of the total in this age category. The reason for focusing on the youth cohort in understanding the dynamics of civic engagement is because it this age group will ensure that investments on public participation will sustain over time. It will also facilitate the transformation of the current generation into an adulthood which will thrive on the skills and capabilities to adapt to rapid changes. This cohort can form the precursor of cultural and societal transformation-**a micro-level change leading to a macro outcome.**

One implication resulting from this is that development strategies, policies and programs oriented for the youth will need to be inclusive of the rural development programs. The youth, especially rural youth in the case of India, needs to have vested interest in the common future, where they are equal stakeholders of the shared pool of resources and have a role to play in the development of their communities. For India, education and employment still remain and have become the most urgent concern for the youth in rural areas. In the last decade, data on employment has shown an increasing rate of unemployment. The net change in employed persons per year declined from 7.76 mn (2000-2004-05) to 2.93 mn during 2004-05-2010 and continued its fall further-1.73 mn (2009-10-2011-12) (NSSO, Employment and Unemployment Survey, 68<sup>th</sup> round 2011-12). In the 15-29 age group, unemployment rate goes up with higher educational level-16.3 percent of urban male graduates were unemployed. For rural males, the print was 19.1 percent. The trend is more disheartening for females, both in rural and urban areas. Another government report estimated the unemployment figure at 13.3 percent for persons in the age group of 15-29 years (*Youth employment-unemployment scenario, 2012-13*, Ministry of Labour and Employment 2013). The report was based on a survey carried out between October, 2012 and May, 2013. The report reiterated the NSSO findings that unemployment rose with higher level of education. In rural areas, unemployment rate for graduates was 36.6 percent while the same in urban areas was 26.5 percent.

Lack of employment opportunities for educated youth translates into unrest at the individual level; all the above data is an indicator at the growing resentment with public policies amongst the youth. This acts as an immediate spark to people engagement on public policy. This impetus is however a flare-up ignited by the existing conditions. Whether this momentum stays its course over time is another issue of debate. Another inference from the above data and data on spread of internet in rural areas is that educated youth in rural areas are likely to have similar opinions regarding state action given their condition. However, limited internet access implies that the

kind of civic engagement that could take place is left in vacuum. In such a condition, the economy could stand to lose the opportunity of reaping benefits from its demographic dividend. Poverty, unemployment and inequality in share of assets across classes could fuel political unrest and social disorder.

All this while, the role of the youth was elucidated, understanding the conditions that create an environment of public participation, the Indian scenario-how the economy is unable to reap the complete potential of its youth population because opportunities are not being created enough for this cohort to be able to make the transformation into an responsible adulthood who will in turn create conditions for change. But since this is dialogue process involves two actors-the state and society, the role of the government needs to be defined accurately and transparently. India recognized the growing importance of information technology when it swept the globe during 1980s. This was followed by a paradigm shift in governance during the early 1990s. Countries started talking the language of e-governance. India launched the National e-Governance Plan (NeGP), its pet project for increasing accountability and transparency in its working and service delivery. Today, there's a wider consensus that citizen participation and civic engagement are the stepping stone to reach a higher level of democracy. Alongside rapid rise in internet usage and increase in spread of internet, there was an exemplar shift in delivery of essential public services-from human to technology interface. This has resulted in the launch of several dedicated portals which provide detailed information on government services, schemes and gives access to official data banks. For all purposes, it can be accepted that the state has taken IT as a tool for information dissemination and service delivery acutely. As of today, there is no difficulty in obtaining data or resources on any government department. This forms the first stage of public participation or participatory governance. Provision of information from the government towards its citizens is the necessary condition. The next and crucial part is the conversation that occurs between the two actors based on this information flow. What needs to be analyzed is the extent to which this engagement has taken place.

As the government is incorporating ICTs into the delivery of Government to Consumer (G2C) services, there are hardly any embedded mechanisms to facilitate the space for citizen participation in e-governance. This is especially true for the weakest and the most marginalized sections of society for whom the e-Governance projects are created to serve the most. The problem gets further compounded for the very nature of our developing economy which is characterized by-

- High rural population who still do not have access to the internet
- Low literacy rate-74.04 percent of the population is literate with wide gender disparities. India is still home to the highest number of illiterates in the world. On the other hand, the urban-rural gap is declining over the decade, as per Census. In 2011, the gap was of 16.3 percent with urban literacy at a higher 84.1 percent.

- Low rural tele-density which reduces the scope of outreach of services on technology based interface.
- The presence of multi-lingual system calls for the need to make service delivery mechanism in local languages

### **Argument 3: Delivery of services using ICT**

In spite of the inherent difficulties and obstructions, government efforts have not diminished. With the help of Civil Society Organizations (CSOs), the government is trying to increase its visibility and accessibility to its citizens through ICT tools. Projects are being integrated across departments to provide a single point access and delivery window for services to citizens. Maximum transparency has been ensured through citizen charters available over the internet. The Information Act passed in 2002 under the ambit of Article 19 enshrined in the Constitution enables citizens to get the information from the government at all levels. A few of the significant government projects promoting electronic governance are expounded below:

**Andhra Pradesh:** It was the first Indian state to implement ICT in the governance process, specifically for service delivery to citizens. It is one of the few states which have implemented ICT in a large scale to impact the life of its citizens. The government had announced the first ICT policy in May 1999 followed by a second one in June 2002 for attracting investments to the state. The policy mentions “e-governance as one of the crucial components in realization of the concepts of SMART government”.

The major e-governance projects in the state are: Andhra Pradesh State Wide Area Network (APSWAN), Computer-aided Administration of Registration Department (CARD), the Andhra Pradesh Development Monitoring System (APDMS), the Fully Automated Services of Transport (FAST) and Secretariat Knowledge and Information Management System (SKIMS) and Twin Cities Network Services (TWINS). The TWINS project, launched in 1999 in AP provides a variety of services at one spot to the citizens of Secunderabad, Hyderabad and Ranga Reddy districts. Department functionaries interact with citizens through 39 e-seva centres and 350 service centres to deliver services. It is now a cornerstone in e-governance initiatives and acts as a model for similar projects in other states. The services include the payment of electricity, telephone bills, water and sewerage, property and sales tax, registration and issue of births/deaths, caste and nativity certificates, sale and receipt of applications for passport and telephone connections, driving license. Information regarding government departments like tourism, education, health, revenue, and rural development etc. can be obtained from these centers. Citizen can also avail online service facilities such as, e-Forms, e-Filing, e-payments, e-reservations and so on.



Madhya Pradesh: The government introduced an internet based Government to Citizens (G2C) service delivery portal, called Gyandhoot in January 2000. This project benefits over a million people spread across 311 gram panchayats covering 600 villages. Gyandoot is a portal created to provide cost-effective, replicable, economically self-reliant and financially viable model for taking the benefits of Information and Communication Technology (ICT) to the rural masses. Through this knowledge portal, citizens can avail various benefits, such as crop prices, copies of land records, government applications assistance, obtaining of income, domicile, and caste certificates, redress of grievances, and so on. This project has received worldwide recognition and received the Stockholm Challenge IT award 2000 and the Computer Society of India IT award 2000 for best IT usage in India. This project has enhanced citizen participation through the creative use of ICT for the village community. The project has specifically benefited unemployed rural youth who manage ICT kiosks set up by the government which caters to the ICT requirements of the rural consumers.

Gujarat: Government of Gujarat has set up Gujarat State Data Center (GSDC) at Bureau of Economics and Statistics operational in the state capital. GSDC includes 2600 square feet of server & storage area, 600 square feet of connectivity zone and 1300 square feet of control room & utility area. GSDC has been connected to all the Government offices through GSWAN infrastructure. Gujarat State Data Centre acts as a mediator and convergence point between open unsecured public domain and sensitive government environment. The GSDC has been equipped to host / co-locate systems such as Web Servers, Application Servers, Database Servers, SAN, and NAS etc. GSDC provides much functionality such as Central Repository of the State, Secure Data Storage, Online Delivery of Citizen Information/Services Portal, State Intranet Portal, Disaster Recovery, Remote Management and Service Integration etc. GSDC also provides better operation & management control and minimizes overall cost of Data Management, IT Resource Management, Deployment and other costs.

Maharashtra: Warana is a well-developed rural area located 30 kilometers northwest of the city of Kolhapur, in Maharashtra. About 50,000 farmers live in 100 villages spread in the 25,000-sq. kilometer area covered by the co-operative. The main economic activity is sugar cane growing and processing. ICT was brought to this area by the Warana "Wired Village" project, launched in 1998 as collaboration between the National Informatics Centre (NIC), the Government of Maharashtra, the Warana Vibhag Shikshan Mandal (Education Department) and the WGC. Warana already had the right conditions for setting up an ICT infrastructure such as power supply and an educated human resource base to use the tools. The main goals of this project were to improve the functioning of rural co-operative societies (Warana Co-operative society) and to provide information to the communities in 70 villages around Warana Nagar, including crop prices, market data government schemes and educational opportunities. Under this project, information kiosks have been set up to facilitate the sugar co-operatives and other information. The project has already increased the efficiency of the sugar cane growing and harvesting process, both in terms of time saved by the farmers on administrative transactions as well as in

terms of monetary gains. Before computerization, it used to take two or three days for farmers to find out how much they had spent and how much they had earned during the harvest, while now all it takes is a visit to the village kiosk. And as a result of computerization, fertilizer stocks are now smaller and better managed.

Rajasthan: Rajasthan's flagship e-governance G2C project is the RajNidhi, developed to enable citizens to access a number of services. A citizen can obtain information relating to investment opportunities, tourism (tourist places, fairs and festivals, forts, sanctuaries), health (family planning and immunization of children), employment, transportation, distance education, and agriculture. It is a web enabled information kiosk system developed jointly by the State Department of Information Technology and Rajasthan State Agency for Computer Services. The kiosk provides an opportunity for the citizen to send complaints and suggestions to the Chief Minister and senior officers directly. One can also obtain information regarding procedures for obtaining ration cards, licenses, birth/death, and caste certificates, and water and electricity connections.

## **Conclusion: The roadmap of ICT in governance**

Although we have made certain inroads in implementing Information and Communication Technology in the governing process in G2C space, there's still a huge untapped potential. The state has taken the first step in providing information to the citizens through ICT tools and provision of public goods and services has been made more transparent and efficient. Certain states have created model architecture for e-governance through their ICT enabled projects. As illustrated, these projects have increased the efficiency of service delivery, reduced administrative costs, introduced transparency in the mechanism and most importantly, made the citizens equal stakeholders in those initiatives. Majority of the projects are based in villages, aimed at accelerating rural development. The presence of ICT in rural sector gives an impetus to the existing government schemes by making the village community interact with the government on the internet, access the required information and get their grievances addressed. A common thread running across the states which have spear-headed the National e-Governance Plan (NeGP) is their level of economic growth and development. The above examples and other such cases (Kerala, Karnataka) are relatively higher on the growth trajectory as compared to other states. The growth in Gross State Domestic Product (SGDP) for year-on-year (Y-o-Y) is 5.51 percent for Andhra Pradesh, 4.60 percent for Rajasthan and 11.08 percent for Madhya Pradesh, according to data released by the Central Statistical Organization (CSO) and Planning Commission (data as of 31<sup>st</sup> May, 2014). Data for Maharashtra and Gujarat were not available. However, during the financial year 2012-13, Maharashtra recorded an increase of 7.13 percent while Gujarat grew at 7.96 percent. This reveals that implementation of ICT framework in the governance framework, to be able to use ICT for as a means for better governing of the society, the geography should be sufficiently developed. This could be compared to the take-off stage of development (Rostow's Stages of Growth theory).

However, if we look at other developing nations, where the citizen participation in public policy debate has sparked major public dissent over the internet on the current state of functioning of their governments the opposite seems to be true. Cases in point are Egypt, Latin American countries and Eastern European nations. Majority of internet users in these emerging nations participate on social media like Facebook and Twitter actively to voice their opinion, form united voice on government policies and disseminate content to create awareness. Research findings suggest that youth population is the most active age group on the internet. (*Emerging Nations Embrace Internet, Mobile Technology*, Pew Research Center, February 2014). It has also shown that mobile telephony is on the rise, due to cheap availability and presence of mobile internet. Sharing political views on social media is fast growing in emerging nations which are undergoing a change in the political system. Political discourse online is particularly popular in the Middle-east and sub-Saharan Africa. Such findings reveal a contrasting process of ICT involvement, one which is sparked by unrest and uproar in society over political turmoil. Nations going through massive public unrest have embraced internet as the foremost medium for quick spread of information and mobilization of resources.

The growth trend of ICT in India suggests that there's a demarcated divide between urban and rural areas when it comes to internet penetration. While at the other hand, literacy among the youth is rising with declining gap in urban-rural rates. While India is at a stage reaping the potential of her demographic dividend, the state of economy and society could spell ill for the young generation. As the youth transcends into adulthood, they need to play the role of responsible citizens, duly aware of the independence enjoyed in a democratic political system. Democracy merely not means exercising the franchise to vote. In the existing system of liberal democracy, where liberal describes the lackadaisical political behaviour of the public, there exists a tendency to reach a state of inertia. The society tends to neutralize itself to political discourse. The need of the state is 'strong' democracy, defined as the participation of all of the people in at least some aspects of self-government at least some of the time, Strong Democracy offers liberal society a new way of thinking about and of practicing democracy.

Similarly, democracy also calls for voluntary association of the citizenry, wherein participation in non-governmental authority (decision-making) structures is necessary to foster and develop the psychological qualities of the society that will ultimately result in participation in the decision-making process of the nation. Carole Pateman (*Participation and Democratic Theory*, 1970) argues that participation in the decision making process at the respective workplaces will lead to creation of inherent structures within the individuals which will ultimately lead to community-based participation in public policy. According to Pateman, full participation means, "a process where each individual member of a decision making body has equal powers to determine the outcome of decisions."

For a developing nation like India, the process of governance and civic engagement should initiate from the presence of responsibility of participation among the population. Electronic governance serves as a means to initiate the dialogue between the government and the citizen which uses ICT tools and infrastructure. In this regard, we have seen that existence of wide-spread network of internet and communication network is a necessary condition. Also to be noted is the share of the population having access to the physical hardware (mobile, computer) to access the internet. In terms of technology, India has made its mark in the world as provider of unique IT solutions. Nevertheless, the same IT solutions are yet to be implemented on a nationwide scale in delivery of public good and services. The issue of digital divide is often discussed in terms of the outreach of information technology and communication infrastructure that provides electronic connectivity. Although availability of adequate bandwidth and reasonable access to internet are key factors in bridging the digital divide, these alone are not sufficient for providing benefits of e-governance to the common people, particularly the rural poor. The relevance and usefulness of content to meet the local needs of people are very important in making a creative use of technology to bridge the digital divide for achieving the developmental goals. Not only this, a conscious effort to enmesh the basic principles of good governance in information technology related initiatives is also necessary to ensure that the poor and the vulnerable are able to easily access the services that the government provides to them.

Also needed to be analyzed is the dynamics of civic engagement-what is the impetus that gives rise to community-based participation in governing process, what will sustain such participation, how does the state ensure the existence of conditions that enables individual participation without chaos and uproar in the society. Similarly, use of Information Technology by the state as a public good in itself will need to be justified on the canons of public expenditure-**Canon of Benefit:** expenditure is made on those items which are important to the public or which could lead to maximization of utility of the society (vertical summation of individual utilities).

**Canon of Economy:** Expenditure be made with great care and the level of expenditures must be minimum at any item. Since establishing the technology framework, the architecture and the system involves overhead costs, spending on ICT as a Social Overhead Capital (SOC) will need to justify taxpayers' money.

From the citizen point of view, such engagement should be a general progression in terms of needs of society as it progresses. From fulfilling its demand for commodities, luxury and stable economy, the wants shift towards the type of political system. Assuming that such a system exists in the form of democracy, public participation in policy-making process should become a practice of all governments and not a result of turmoil or dissatisfaction from the present political order. In this regard, India has had a stable process of administration and governance. What is concerning is the way youth is shaping up in the presence of an environment of economic uncertainty. With high literacy and low employment, the young cohort of 15-29 years is increasing taking to social media to offer shared content on politics and policies. However, that outreach is restricted. As pointed earlier, rural population still has a negligible access to the internet. Moreover, C2C engagement depends on the information shared. The source of information lies with the state. Therefore, G2C interaction is a pre-requisite, based on transparent and efficient flow of information. Right from reforming the mammoth electoral process to service delivery, the roles of both the actors (state and society) needs to be proactive and complementary to each other. Both should be able to communicate as equal stakeholders in decision making process. The role of ICT is that of a mediator, bridging the information gap between the two and providing the necessary conditions for a better democratic process in the future.

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